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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,808	07/09/2003	Wayne L. Bilodeau	AVERP3299USA	1464

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EXAMINER

DESAI, ANISH P

ART UNIT	PAPER NUMBER
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1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/615,808

Applicant(s)

BILODEAU, WAYNE L.

Examiner

Anish Desai

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-18 and 20-43 is/are pending in the application.
- 4a) Of the above claim(s) 21-36 and 38-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-18,20,37 and 43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The applicant's arguments in response to the Office action dated 07/26/06 have been fully considered and are persuasive.

1. Claims 1, 3-18, and 20-43 are pending. Claims 2 and 19 are cancelled. Claims 21-36 and 38-42 are withdrawn.

2. All of the art rejections are withdrawn. The art rejections of Miyazaki et al. (US 5,863,624) are withdrawn because Mizayaki does not teach the adhesive is curable without application of an external energy source. Additionally, claim 17 was improperly rejected over the reference of Mizayaki because the applicant had elected species (a) with primary amine as a curing agent NOT anhydride based curing agent. The art rejections of Le Compte (US 3,723,223) are withdrawn because Le Compte does not teach two-part adhesive. The art rejections of Dornbusch et al. (US 4,883,697) are withdrawn because Dornbusch does not teach a two-part adhesive and a curing agent comprising primary amine, polyamine, or a mixture of two or more thereof. However, upon further consideration a new ground of rejections is made over Batdorf (US 4,070,225).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 4, 17, and 18 are rejected under 35 U.S.C. 102(b) as anticipated by Batdorf (US 4,070,225).

With respect to the preamble limitation of “A label”, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Any reference disclosing a polymer facestock with an adhesive layer of claim 1 is considered to be capable of functioning as a label.

With respect to claim 1, Batdorf teaches two-part, high solids curable adhesive (abstract and column 8 lines 23-27) that can be used to coat plastic substrates (polymer facestock) (abstract and column 8 lines 54-56). Further, the adhesive of Batdorf comprises epoxide as part A and a curing agent such as a primary amine terminated polyamide (column 3, line 17 and column 4, lines 6-9). With respect to the limitation of “adhesive is curable without application of an external energy source”, Batdorf teaches that by using conventional epoxides with epoxides equivalent weight greater than 60

Art Unit: 1771

and primary amine terminated polyamine curing agents with a ball and ring softening point of 60° to 200° C, a mixture can be formed which upon the initiation of epoxide cure reaction, gives sufficient immediate bonding strength to hold the substrates together and which will continue to cure after then initiation conditions have been removed, that is under normal ambient conditions (column 2, lines 14-23).

With respect to claim 3, Batdorf teaches that other ingredients such as tackifier resins can be added to the two-part adhesive (column 8, line 37). Regarding claim 4, Batdorf teaches that the polyamides used in this invention are preferably thermoplastic and exhibit some or substantially all of the properties of a hot melt composition. Having hot melt characteristic means that some bonding can be obtained by the hot melting behavior itself, even before reactions with the epoxide component have progressed beyond the initial state of cure. One can thus take advantage of the bond provided by the hot melt behavior, e.g. by forming an article with sufficient integrity to be put to use, stored or further processed while epoxy curing reactions are progressing (column 5, lines 38-48). With respect to claim 17, as previously noted the two-part adhesive of Batdorf comprises epoxy resin (column 3, lines 19-60) and a primary amine terminated polyamide (column 4, lines 6-9). Regarding claim 18, the epoxy resin of Batdorf is diglycidyl ether of bisphenol A (column 11, line 22) and the curing agent is a primary amine terminated polyamide (column 4, lines 6-9).

Art Unit: 1771

4. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as anticipated by Schuft (US 6,248,204 B1).

With respect to the preamble limitation of "A label", a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Any reference disclosing a polymer facestock with adhesive layer of claim 1 would read on a label.

Schuft discloses a two-part room temperature curable thermosetting epoxy adhesive composition which includes epoxy resin as a first component and an epoxy resin hardener such as oxyethylene diamine (title, abstract and column 5, lines 39-40). With respect to the claim limitation of "high solids", it is noted that the two-part epoxy resin of Schuft comprises no volatile solvents and therefore it meets the claim limitation of "high solids". Further the two-part room temperature curable thermosetting epoxy adhesive composition of Schuft is useful in application such as bonding together substrates wherein at least one of the substrate is phenolic composites (polymer facestock) (column 7, lines 33-38). With respect to claim 5, Schuft discloses that the composition has a shear thinning viscosity of less than about 300,000 cps (column 7, lines 30-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as obvious over Batdorf (US 4,070,225) in view of Scholz (US 5,536,800).

The invention of Batdorf is previously disclosed. Batdorf is silent as to teaching of the coat weight of the adhesive layer is from about 5 to about 30 g/m². However, Scholz discloses repulable pressure-sensitive adhesives. According to Scholz, adhesive is coated typically to coat weight of 20 to 25 g/m² (column 3, lines 15-16). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to coat the adhesive of Batdorf in the coat weight of 20 to 25 g/m², motivated by the desire to provide an adhesive layer with sufficient thickness.

6. Claim 7, 8 and 37 are rejected under 35 U.S.C. 103(a) as obvious over Batdorf (US 4,070,225) in view of Miyazaki et al. (US 5,863,624).

The invention of Batdorf is previously disclosed and it is equally applicable to claim 37. As previously noted, Batdorf teaches that plastic substrates can be coated with the two-part epoxy adhesive of his invention. Batdorf is silent with respect to teaching of polymer facestock as claimed in claims 7, 8, and 37. Miyazaki teaches a can covering polyester film, which is bonded under heat to a metal surface of a can

Art Unit: 1771

through a thermosetting resin adhesive to form a protective coat, wherein the adhesive layer is formed of a resin comprising epoxy resin and hardener (abstract). Additionally, Miyazaki discloses a biaxially oriented polyethylene terephthalate film (column 6, lines 23-24). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use biaxially oriented PET film of Miyazaki in the invention of Batdorft, motivated by the desire to apply the adhesive of Batdorf to plastic substrate such as PET film because such is an intended use of the adhesive of Batdorf.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as obvious over Batdorf (US 4,070,225).

The invention of Batdorf is previously disclosed. Although, Batdorf does not explicitly teach that the surface of the polymer facestock is corona treated or flame treated, it is known in the art to corona treat or flame treat a surface of plastic substrate, motivated by the desire to improve the bondability of the plastic substrate to an adhesive.

8. Claim 1, 11, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dornbusch et al. (US 4,883,697) in view of Batdorf (US 4,070,225).

Dornbusch teaches a flexible multilayer label (abstract). The label of Dornbusch comprises a thermoplastic label stratum (column 6, lines 1-2 and column 6, lines 49-50). Additionally, Dornbusch discloses that the thermoplastic label stratum is laminated to an upper surface of stress-compensating stratum via epoxy-type urethane type adhesive (column 5, lines 54-64). Dornbusch is silent as to teaching of an adhesive layer as claimed in claim 1. The invention of Batdorf is previously disclosed. It would have been

Art Unit: 1771

obvious to one having ordinary skill in the art at the time the invention was made to use the adhesive of Batdorf in the invention of Dornbusch, motivated by the desire to use an adhesive that has very lengthy open time and which can provide strong bond between the label stratus and stress-compensating stratum.

Regarding claim 11, Dornbusch teaches that it is desired to include special ornamental label effects such as printed and metallic portions (column 6, lines 63-64). With respect to claim 12, Dornbusch discloses protective layer formed of polyethylene (column 7, lines 13-14). Regarding claim 14, Dornbusch discloses a protective layer such as polyethylene film (column 7, lines 13-15). Although Dornbusch does not explicitly disclose that polyethylene film is chemical resistant, it is known in the art that polyethylene is chemical resistant as evidenced by Al et al. (US 3,915,478) (column 2, lines 49-53).

9. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dornbusch et al. (US 4,883,697) in view of Batdorf (US 4,070,225) as applied to claim 1 above, and further in view of Alonso (US 4,654,262).

Dornbusch as modified by Batdorf is silent as to teaching of and a barrier or tie coating layer between the polymer face stock and the two-part curable adhesive. However, Alonso teaches coupling agents (primer) that can be applied to the surface of a polyolefin resin to modify the surface of the polyolefin resin highly receptive to adhesion (abstract). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the coupling agents of Alonso on the

surface of the thermoplastic label stratum of Dornbusch, motivated by the desire to enhance the adhesion between the thermoplastic label stratum and the adhesive.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dornbusch et al. (US 4,883,697) in view of Batdorf (US 4,070,225) as applied to claim 1 above, and further in view of Sackoff et al. (US 4,151,319).

The invention of Dornbusch as modified by Batdorf is previously disclosed.

Dornbusch is silent with respect to teaching of the protective layer comprises a polyamide, cellulosic polymer, silicone polymer, or any combination thereof. However, Sackoff teaches pressure sensitive adhesive coated laminates such as labels (abstract). Additionally, Sackoff teaches that it is possible to use a top layer which is substantially transparent sheet of a protective film e.g. polyethylene, urethane etc. (column 8, lines 10-11). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the urethane based transparent protective film of Sackoff in place of polyethylene based protective sheet in the invention of Dornbusch, because polyethylene and polyurethane have been shown in the art to be recognized equivalent protective films for the labels.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dornbusch et al. (US 4,883,697) in view of Batdorf (US 4,070,225) as applied to claim 1 above, and further in view of Musclow et al. (US 5,380,587).

The invention of Dornbusch as modified by Batdorf is previously disclosed.

Dornbusch is silent as to teaching of an adhesion promoting layer between the upper surface of the polymer facestock and the print layer. However, Musclow teaches a

Art Unit: 1771

printable film structure comprising a polymeric film substrate having on at least one surface thereof a prime coating (abstract). Further Musclow teaches a multilayer packaging or label stock film having excellent printability and non-blocking characteristics. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a prime coating of Musclow and apply it on the surface of the thermoplastic label stratum of Dornbusch, motivated by the desire to enhance the bonding between the printed matter and the label stratum.

12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dornbusch et al. (US 4,883,697) in view of Batdorf (US 4,070,225) as applied to claim 1 above, and further in view of Shih et al. (US 6,153,288).

The invention of Dornbusch as modified by Batdorf is previously disclosed. Dornbusch is silent as to teaching of a layer of ink receptive composition between the upper surface of the polymer facestock layer and the print layer. However, Shih teaches coatable ink-receptive compositions and coated substrates such as labels (abstract). According to Shih et al., improvements are seen in color density, resolution, color gradient, drying time, smudgeproofness, and water-fastness (column 1, lines 63-65). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a layer of ink receptive composition in the invention of Dornbusch, motivated by the desire to enhance the color density, resolution, color gradient, drying time, smudgeproofness, and water-fastness of the printing on the label of Dornbusch.

Art Unit: 1771

13. Claim 20 is rejected under 35 U.S.C. 103(a) as obvious over Batdorf (US 4,070,225) in view of Handbook of Adhesives and Sealants by Petrie, E.M. (page 360).

The invention of Batdorf is previously disclosed. Batdorf is silent with respect to teaching of adhesive further comprises a reactive diluent. However, according to Petrie, E.M, reactive diluent are added to epoxy based adhesive to adjust the viscosity of epoxy adhesives (page 360). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to add the reactive diluent to the two-part epoxy adhesive of Batdorf, motivated by the desire to adjust the viscosity of the adhesive such that the adhesive can be applied with ease to a substrate.

14. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Batdorf (US 4,070,225) in view of Le Compte (US 3,723,223).

The invention of Batdorf is previously disclosed. Batdorf is silent as to teaching of primary amine curing agent as claimed in claim 43. However, Le Compte teaches an adhesive material prepared by applying to a carrier a blend of solid epoxy resin and solid curing agent (abstract). The carrier can be any sheet material such as polyethylene (column 4, line 4). Further Le Compte discloses adhesive such as tetrafunctional polyglycidyl ethers of terphenylene (tradename EPON 1031) (column 1, line 68 and column 2, line 1) and hardeners such as paraphenylene diamines (column 2, line 16). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use hardener such as paraphenylene diamine of Le Compte in the adhesive of Batdorf, motivated by the desire to cure the adhesive.

Art Unit: 1771


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anish Desai whose telephone number is 571-272-6467. The examiner can normally be reached on Monday-Friday, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

APD


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